

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

**LISTING OF CLAIMS:**

1. (Currently Amended) A variant of the Moloney murine leukemia virus reverse transcriptase of SEQ ID NO:2, except having wherein the amino acid X at position 84 is amino acid X, which is an amino acid with a side chain shorter than that of glutamine.
2. (Currently Amended) The reverse transcriptase of claim 1, except having wherein the amino acid asparagine at position 524 is replaced with the amino acid aspartic acid.
3. (Previously Presented) The reverse transcriptase of claim 1, wherein the amino acid X is alanine, serine, aspartic acid or asparagine.
4. (Original) The reverse transcriptase of claim 3, wherein the amino acid X is alanine.
5. (Withdrawn) A nucleic acid molecule encoding the reverse transcriptase of claim 1.

6. (Withdrawn) A method for expressing a recombinant murine leukemia virus (MLV) reverse transcriptase, said method comprising the steps of:

a) transforming an expression vector carrying the coding sequence of said reverse transcriptase into *E. coli*;

b) selecting positive clones that express said reverse transcriptase; and

c) culturing said positive clones to express said reverse transcriptase,

wherein said reverse transcriptase is a variant of MLV reverse transcriptase of SEQ ID NO:2, wherein the amino acid at position 84 is amino acid X, which is an amino acid with side chain shorter than that of glutamine.

7. (Withdrawn) The method of claim 6, wherein the amino acid asparagine at position 524 is replaced with aspartic acid.

8. (Withdrawn) The method of claim 7, wherein the amino acid X is alanine.

9. (Withdrawn) The method of claim 8, wherein said reverse transcriptase is expressed by the expression plasmid having the sequence according to SEQ ID NO:1.

10. (Withdrawn) The methods of claim 6, wherein said *E. coli* strain is BL21.

11. (Withdrawn) The methods of claim 7, wherein said *E. coli* strain is BL21.

12. (Withdrawn) The methods of claim 8, wherein said *E. coli* strain is BL21.

**AMENDMENT UNDER 37 C.F.R. § 1.111**  
**U.S. Application No. 10/585,863 (Q95957)**

13. (Cancelled).

14. (Previously Presented) The reverse transcriptase of claim 2, wherein the amino acid X is alanine, serine, aspartic acid, or asparagine.

15. (Previously Presented) The reverse transcriptase of claim 14, wherein the amino acid is alanine.

16. (Currently Amended) A variant of the wild type Moloney murine leukemia virus reverse transcriptase, wherein said wild type Moloney murine leukemia virus reverse transcriptase has the amino acid sequence of SEQ ID NO:9, ~~except having wherein said variant has an~~ amino acid mutation at position 84 such that the glutamine is replaced with amino acid X, wherein said amino acid X is an amino acid with side chain shorter than that of glutamine.